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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,970	02/22/2006	Marcus Guzmán	285634US0PCT	8863
22850	7590	12/10/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
BOYLE, ROBERT C				
ART UNIT		PAPER NUMBER		
4131				
NOTIFICATION DATE		DELIVERY MODE		
12/10/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

### Office Action Summary

**Application No.**

10/568,970

**Applicant(s)**

GUZMANN ET AL.

**Examiner**

ROBERT C. BOYLE

**Art Unit**

4131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 9-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-21 is/are rejected.
- 7) ☒ Claim(s) 15-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 2/22/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

#### ***Claim Objections***

1. Claims 15-17 are objected to because of the following informalities: Claims 15-17 recite “in copolymerized form, as as the monomers.” The second occurrence of “as” should be deleted. Appropriate correction is required.

#### ***Double Patenting***

2. Applicant is advised that should claim 16 be found allowable, claim 17 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 and 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fong et al., U.S. Patent 4,604,431 in view of Krause et al., U.S. Patent 5,760,154.

5. Claim 1 discloses a copolymer of 70-100 mol% of at least two different monoethylenically unsaturated carboxylic acid monomers, which have been reacted with 5-30 mol% of an amino-C-C-sulfonic acid, and 0-30 mol% nonionic monomers.

6. Fong teaches reacting acrylamido sulfonic acids with at least 5 mol% acrylic acid or methacrylic acid groups in a polymer made of 100% carboxylic acid groups (abstract; column 1, lines 63-64) and using copolymers (column 1, lines 54-56). Fong does not teach using at least two different carboxylic acid monomers. Krause teaches making sulfonated polymers using at least two monomers: a monoethylenically unsaturated carboxylic acid and a water soluble, radically polymerizable monomers (column 4, lines 14-31). A second unsaturated carboxylic acid is radically polymerizable and water soluble.

7. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the sulfonated polymer in Fong with the sulfonated polymer taught in Krause because both patents teach incorporating sulfonic groups in polymers and Krause teaches using graft polymers with polyhydroxy compounds to give an improved hydrophilic suspending capacity and an increased efficiency with respect to complexing metal ions (Krause: column 4, lines 5-13). Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made.

8. Claim 2 lists types of carboxylic acids able to be used, which include C3-C6 monoethylenically unsaturated monocarboxylic acids. Fong teaches using acrylic acid and methacrylic acid (column 1, lines 54-56). Krause teaches using acrylic acid and methacrylic acid (column 5, lines 30-32).

9. Claim 3 discloses the copolymer is made up of only carboxylic acid monomers. Fong discloses polymers of only acrylic acid or methacrylic acid (column 1, lines 63-64).

10. Claims 4, 13, and 14 disclose the carboxylic acid monomers are acrylic acid or methacrylic acid. Fong teaches using acrylic acid and methacrylic acid (column 1, lines 54-56).

Krause teaches using acrylic acid and methacrylic acid (column 5, lines 30-32).

11. Claims 5, 15, 16 and 17 disclose the molar ratio of the methacrylic acid: acrylic acid is between 9:1 and 1:2. Krause teaches a copolymer that can have 45-96 wt% a first carboxylic acid and 0-45 wt% of a second carboxylic acid which is water soluble and radically polymerizable.

The ranges of Krause overlap the claimed range and it has been held that overlapping ranges are sufficient to establish *prima facie* obviousness.

12. Claim 6 discloses aminoethanesulfonic acid is the sulfonic acid reacted with the monomers or copolymer. Fong teaches this limitation (column 2, lines 22-24).

13. Claim 7 discloses a method of making a copolymer by making a copolymer of carboxylic acid monomers and then reacting it with an amino-alkane-sulfonic acid. Fong teaches reacting a polymer of acrylic acid with taurine (column 3, lines 8-14).

14. Claims 9 and 18-21 disclose a method of making a detergent by forming a detergent with the copolymer. Krause teaches using a sulfonated copolymer in detergents and cleaners (column 7, lines 5-20).

15. Claim 10 discloses a composition with at least one additive selected from the list, which includes sodium carbonate. Krause teaches this limitation (column 7, lines 28-42).

16. Claim 11 discloses a method of claiming dishware comprising cleaning the dishes with the composition of claim 10. Krause teaches this limitation (column 7, lines 28-47). In the alternative, one of ordinary skill in the art would have realized that a detergent composition could be used to clean dishware.

17. Claim 12 discloses the composition of claim 10 further including a low foam non-ionic surfactant. Krause teaches this limitation (column 7, lines 28-47).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT C. BOYLE whose telephone number is (571)270-7347. The examiner can normally be reached on Monday-Friday 9:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571)272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R. Sample/  
Supervisory Patent Examiner  
Art Unit 4131

/R. C. B./  
Examiner, Art Unit 4131